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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/995,062	11/27/2001	Kazuhiro Suga	CU-2734 RJS	9540
26530	7590	05/19/2004	EXAMINER	
LADAS & PARRY			FERGUSON, LAWRENCE D	
224 SOUTH MICHIGAN AVENUE, SUITE 1200			ART UNIT	
CHICAGO, IL 60604			PAPER NUMBER	

1774

DATE MAILED: 05/19/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/995,062

Applicant(s)

SUGA ET AL.

Examiner

Lawrence D Ferguson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6, 11 and 12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6, 11 and 12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. This action is in response to the amendment mailed September 29, 2003.

Claim 1 was amended rendering claims 1-6 and 11-12 pending.

New Matter - 35 U.S.C. 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claim 1 rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. In claim 1 the phrase, "wherein the panel section is formed of a mixed material containing major panel components and a conductive material" is not supported by the specification. The full disclosure on page 6, lines 6-9 of the specification supports the phrase "a panel section formed of a mixed material consisting of major panel components and a conductive material such that the conductive ink layer is in contact with the plate surface."

Claim Rejections – 35 USC § 103(a)

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-2, 4-6 and 11-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Spa (U.S. 6,537,359).

Spa discloses an electromagnetic wave shielding material applied to a substrate (column 1, lines 4-14) and teaches lamination and applying a conductive ink by means of printing (column 1, lines 25-31). Spa discloses the conductive ink is applied to a part in the form of a grid or another functional pattern (column 1, lines 38-40), which is analogous to net-wise, as depicted in Figure 2. Spa discloses an ink or paint, which is used for applying electromagnetic shielding layer to a moulded part (column 2, lines 44-47) being plate-shaped (column 4, lines 31-32). Spa further discloses the ink is applied to a substrate (column 2, lines 58-60). The reference discloses the material contains polyols and isocyanate (column 5, lines 59-61) and the electrically conductive layer has a surface resistance lower than $10000 \Omega/\square$, as in instant claim 11. Spa discloses the amount of conductive ink is 30-90 wt% (column 6, lines 23-32). In claims 4-6, the phrase '...used as a vehicle of the ink forming the conductive ink layer in the electromagnetic wave-shielding sheet' is directed to intended use. A recitation of the intended use of the claimed invention must result in a structural difference between the

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claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. In a claim drawn to a process of making, the intended use must result in a manipulative difference as compared to the prior art. See *In re Casey*, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963). Furthermore, intended use is given little patentable weight. Additionally, in claim 1, '...prepared by forming a conductive ink layer on one surface of a base material sheet by printing, and is laminated on the panel...' introduces a process limitation to the product claim. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process." *In re Thorpe*, 777 F.2d 695, 698, 227 USPQ 964, 966. Further, process limitations are given no patentable weight in product claims. Spa does not explicitly disclose polyol being a major component. It would have been obvious to one of ordinary skill in the art for the polyol to be the main component of the wave-shielding material because there are only fillers or additives present in the composition.

Claim Rejections – 35 USC § 103(a)

6. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Spa (U.S. 6,537,359) in view of Nagano et al (U.S. 5,455,117) further in view of Okada et al (U.S. 6,448,492).

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Claims 1-2 are relied upon as indicated above. Spa does not disclose a line width of 0.5mm or more or an opening ratio of 30% or more. Nagano teaches an electromagnetic wave reflection preventing material shielding electromagnetic waves (column 2, lines 10-13) having a line width of 500micrometers (0.5mm) of an electrically conductive ink (column 16, lines 25-26). Additionally, Okada discloses an electromagnetic wave shielding material (column 2, lines 24-27) having an opening ratio 60 to 90% (column 9, lines 40-45). All the references are analogous because they are from the field of electromagnetic wave shielding materials. It would have been obvious to one of ordinary skill in the art to include the line width and opening ratio of Nagano and Okada in the conductive ink layer of Spa because Nagano teaches the line width of the electrically conductive ink varies in examples 14-17 and Okada teaches a open area gives a rectangular or square lattice like openings, which give more effective shielding properties (column 9,lines 16-45).

Claim Rejections – 35 USC § 102(e)

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

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8. Claims 1-2 are rejected under 35 U.S.C. 102(e) as being anticipated by Yoshikawa et al. (U.S. 6,255,778).

Yoshikawa discloses an electromagnetic wave shielding material comprising a panel, where the plate is bonded to the electromagnetic wave shielding material (column 2, lines 30-44) where the electromagnetic wave shielding material is a conductive foil (column 3, lines 12-20) where the conductive layer is made of conductive ink (column 3, lines 59-67). Yoshikawa discloses the conductive material is laminated (column 8, lines 41-42). In claim 1, the phrase, '...prepared by forming a conductive ink layer on one surface of a base material sheet by printing, and is laminated on the panel...' introduces a process limitation to the product claim. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process." In re Thorpe, 777 F.2d 695, 698, 227 USPQ 964, 966. Further, process limitations are given no patentable weight in product claims. Figure 7 shows the conductive ink layer is formed net-wise (column 5, lines 47-49).

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Yoshikawa et al. (U.S. 6,262,364) teaches electromagnetic wave shielding material and plate with a conductive mesh member (column 2, lines 20-46). Additionally, Yoshikawa et al. (U.S. 6,150,754) teaches an electromagnetic wave shielding material comprising a transparent conductive film and conductive mesh

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member (column 4, lines 20-30). Yoshikawa et al. (U.S. 6,063,479) teaches an electromagnetic wave shielding plate with conductive material (abstract).

Response to Arguments

10. Arguments made regarding rejection under 35 U.S.C. 103(a) as being unpatentable over Spa (U.S. 6,537,359) have been considered but are unpersuasive. Applicant argues Spa does not teach the panel section containing a conductive material, as claimed in independent claim 1. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., the panel section containing a conductive material) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Claim 1 reads '...a conductive ink layer on one surface of a base material sheet by printing, on at least one plate surface of a panel section formed of a mixed material containing major panel components and a conductive material such that the conductive ink layer is in contact with the plate surface.' Applicant does not claim the panel contains a conductive material, but claims 'a conductive ink layer on one surface of a base material' and 'the conductive ink layer is in contact with the plate surface.' This does not imply the conductive material is in the panel, but that it is adjacent to the panel.

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Spa discloses an ink or paint, which is used for applying electromagnetic shielding layer to a moulded part (column 2, lines 44-47) being plate-shaped (column 4, lines 31-32). Applicant further argues Spa fails to teach the feature of a panel section containing a conductive element. Spa discloses an ink or paint, which is used for applying electromagnetic shielding layer to a moulded part (column 2, lines 44-47) being plate-shaped (column 4, lines 31-32), meeting the limitations of claim 1.

Conclusion

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lawrence Ferguson whose telephone number is 571-272-1522. The examiner can normally be reached on Monday through Friday 9:00 AM – 5:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cynthia Kelly, can be reached on 571-272-1526. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should

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you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).



Lawrence D. Ferguson
Examiner
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CYNTHIA H. KELLY
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700

